### **CONTENTS TO VOLUME 15**

# COMPUTATIONAL PHYSICS

### Issue Page

- 1 Parameterisation of the environment for transportable numerical software. B. Ford
- 1 5 Statistical test for pseudo-random number generators. S. Garpman and J. Randrup
- 1 15 Computer simulation of threshold switching in non-crystalline semiconductors. Z. Rycerz
- 3 153 Accurate computation of fourth-order vacuum polarization. C. Chlouber and M.A. Samuel
- 3 161 The null-event method in computer simulation. S.L. Lin and J.N. Bardsley
- 5 303 Preface, programme and organizing committees. J. Nadrchal
- 5 305 Computer system architecture for laboratory automation. B.K. Penney
- 5 317 The programming language PEARL and its implementation. K. Pelz
- 5 325 Design principles of a resource sharing real-time system. B. Gliss
- 5 329 Software for graphic display systems. A.A. Karlov
- 5 335 Computer aided laboratory instruction. F. Kaiser and H.M. Staudenmaier
- 5 341 CAMAC high energy physics electronics hardware. I.F. Kolpakov
- 5 347 On-line and real-time processing in radio astronomy. J. Schraml

## COMPUTER PROGRAMS IN PHYSICS

### Issue Page

- 1 23 IMPACT: a program for the solution of the coupled integro-differential equations of electronatom collision theory. M.A. Crees, M.J. Seaton and P.M.H. Wilson
- 1 85 SUBMMW: a theoretical model to predict CW sub-millimeter wave laser performance. K. Smith
- 1 97 INTERACTIVE POSITRONFIT: a new version of a program for analysing positron lifetime spectra. C.J. Virtue, R.J. Douglas and B.T.A. McKee
- 1 107 A program for calculating gamma-gamma directional correlation coefficients and angular distribution coefficients for gamma rays of mixed multipolarities from partially aligned nuclei. R.J. Rouse Jr., G.L. Struble, R.G. Lanier, L.G. Mann and E.S. Macias
- 1 125 A program for calculating the angular distribution of nonrelativistic Bremsstrahlung intensity. A. Banuelos and F. Rodriguez-Trelles
- 1 131 Generation of the Clebsch-Gordan coefficients for Sn. S. Schindler and R. Mirman

## COMPUTER PROGRAMS IN PHYSICS (cont.)

### Issue Page

- 1 147. Functions on tableaux and frames of the symmetric group. S. Schindler and R. Mirman
- 3 165 A-THREE: a general optical model code especially suited to heavy-ion calculations. E.H. Auerbach
- 3 193 A finite range coupled channel Born approximation code. P. Nagel and R.D. Koshel
- 3 227 New Fortran programs for angular momentum coefficients. K. Srinivasa Rao and K. Venkatesh
- 3 237 A Fortran program for routine analysis of magnetic susceptibility data. E.D. von Meerwall
- 3 247 Fine structure cross sections from reactance matrices: a more versatile development of the program JAJOM. H.E. Saraph
- 3 259 II. Reduced SU(3) matrix elements. D. Braunschweig
- 3 275 An adaptation of ACRZ to calculate electric quadrupole oscillator strengths. M. Godefroid
- 3 283 CARLA: a code to calculate the population of high spin states through compound nucleus reactions. C. Savelli and M. Morando
- 3 291 Muonic atom cascade program. V.R. Akylas and P. Vogel
- 5 351 NULLIJN: a program to calculate zero curves of a function of two variables of which one may be complex. P.C. de Jagher
- 5 375 Simulation of ultrasonic degradation of macromolecules in solution. A. Linkens, J. Niezette and J. Vanderschueren
- 5 387 A new program for calculating matrix elements of one-particle operators in jj-coupling. N.C. Pyper, I.P. Grant and N. Beatham
- 5 401 I. A computer program for normalization and instrument correction of neutron diffraction data on non-crystalline materials to obtain the static structure factor. F.Y. Hansen
- 5 417 II. A computer program for calculation of parameters necessary for the computation of reliable pair distribution functions of non-crystalline materials from limited diffraction data. F.Y. Hansen
- 5 431 III. A computer program for calculation of reliable pair distribution functions of noncrystalline materials from limited diffraction data. F.Y. Hansen
- 5 437 A plotting package for visually comparing theoretical and experimental results. J. Anderson, R.C. Beckwith, K.J.M. Moriarty and J.H. Tabor
- 5 443 Erratum. Calculation of wave-functions and collision matrix elements for one-electron diatomic molecules. A. Salin

